

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/591,454
Source: IFWP
Date Processed by STIC: 9/18/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 09/18/2006

PATENT APPLICATION: US/10/591,454

TIME: 15:22:55

Input Set : A:\Q96749 Seq List.txt

Output Set: N:\CRF4\09182006\J591454.raw

```

3 <110> APPLICANT: OTSUKA PHARMACEUTICAL CO., LTD.
W--> 4 <120> TITLE OF INVENTION: Method for detecting cancer caused by viral hepatitis type B
W--> 5 <130> FILE REFERENCE: P05-11
C--> 6 <140> CURRENT APPLICATION NUMBER: US/10/591,454
C--> 6 <141> CURRENT FILING DATE: 2006-09-01
6 <150> PRIOR APPLICATION NUMBER: JP2004-063046
7 <151> PRIOR FILING DATE: 2004-03-05
W--> 8 <160> NUMBER OF SEQ ID: 21
10 <170> SOFTWARE: PatentIn version 3.1
12 <210> SEQ ID NO: 1
13 <211> LENGTH: 2689
14 <212> TYPE: DNA
15 <213> ORGANISM: Human
17 <400> SEQUENCE: 1
18 gtcgagcgcc ccgaggtcgg ggtcgcaagc ataagacgac ccccttctct cctcctcgcc 60
20 tagcagatgt ggctcctacc ccccaaaga cccctgcccg gaaacggggt gaggaaggca 120
22 cagaacggat ggtgcaggca ctgactgaac ttctccggcg ggcccaggca cccaagcac 180
24 cccggagccg ggcatgtgag ccctccaccc cccggcggtc tcggggacgg ccccaggac 240
26 ggccagcagg cccctgcagg aggaagcagc aagcagtagt ggtggcagaa gcagctgtga 300
28 caatcccaaa acctgagccc ccacctctg tggttccagt gaaacatcag actggcagct 360
30 ggaaatgcaa ggaggggccc ggtccaggac ctgggacccc caggcgtgga ggacagtcaa 420
32 gccgtggagg ccgtggaggc aggggcccgc gccgaggtgg tgggtcccc tttgtgatca 480
34 agtttgtttc aagggccaaa aaagtaaaga tgggacaatt gtccttggga ctgcaatcag 540
36 gtcaaggcca aggtcaacat gaggaagtt ggcaggatgt ccccaaaga agagttggat 600
38 ctggacaggg agggagccct tgctggaaaa agcaggaaca gaagctggat gacgaggaag 660
40 aagagaagaa agaagaagaa gaaaaagaca aggagggaga agagaaggaa gaaagagctg 720
42 tagctgagga gatgatgcca gctgcggaaa aggaagaggc aaagctgcca ccaccgcctc 780
44 tgactcctcc agccccctca cctcctccac ccctccacc cccttcgaca tctcctccac 840
46 cccactctg cctccacca ccacccccag tgtccccacc acctctacca tcccctccac 900
48 cgcctcctgc ccaagaggag caggaggaat cccctcctcc tgtggtccca gctacgtgct 960
50 ccaggaagag gggccggcct cccctgactc ccagccagcg ggcggagcgg gaagctgctc 1020
52 gggcagggcc agagggcacc tctcctccca ctccaacccc cagcaccgcc acgggaggcc 1080
54 ctccggaaga cagtccacc gtggccccc aaagcaccac ctctctgaag aatatccggc 1140
56 agtttattat gcctgtggtg agtgcgcgct cctcccggtg catcaagaca cccggcgat 1200
58 ttatggatga agaccccccc aaacccccaa aggtggaggt ctacactgtc ctgcgacctc 1260
60 ccattaccac ctccccacct gttccccagg agccagcacc agtccccctc ccaccacgtg 1320
62 ccccaactcc tccatctacc ccagttccac tccctgagaa gagacggtcc atcctaaggg 1380
64 aaccacatt tcgctggacc tcactgaccc gggagctgcc cctcctccc ccagccccctc 1440
66 cacctcccc gggccccctc ccacccccctg ctctgccac ctctcccgagg gccccctac 1500
68 tccttcgggc cctcagttt accccaagcg aagcccacct gaagatctac gaatcggtgc 1560
70 ttactcctcc tctcttggg gctcctgaag cccctgagcc agagcctcct cctgccgatg 1620
72 actctccagc tgagcctgag cctcgggcag tgggcccgcac caaccacctc agcctgcctc 1680
74 gattcgcccc tgtggtcacc actcctgtta aggccgaggt gtccccctcac ggggctccag 1740

```

RAW SEQUENCE LISTING

DATE: 09/18/2006

PATENT APPLICATION: US/10/591,454

TIME: 15:22:55

Input Set : A:\Q96749 Seq List.txt

Output Set: N:\CRF4\09182006\J591454.raw

```

76 ctctgagcaa cgggccacag acacaggctc agctactgca gcccctgcag gccttgcaaa 1800
78 cccagctcct gcccagggca ctaccgccac cacagccaca gctgcagcca ccgccgtcac 1860
80 cacagcagat gcctcccctg gaaaaagccc ggattgcggg cgtgggttcc ttgccgtgt 1920
82 ctggggtaga ggagaagatg ttcagcctcc tcaagagagc caaagtgcag ctattcaaga 1980
84 tcgatcagca gcagcagcag aagggtggcag cttccatgcc ggtgagtgtg gtccctgggc 2040
86 ccagcggcac acccagccat ccagcctcca ttctttgcaa cccctaacc ttccgcctcc 2100
88 ttggaactt tccaacattg cggggaaccc tcagaacctg cttttctgtg atcccccac 2160
90 ttcccttgtt cctcccaga cctggccctt ctctgtgcta gttccctgtc cctatcttcc 2220
92 tttttttttt ttttttattt ttgagaccga gtctcacttt gtccaggctg gagtgcagtg 2280
94 gcgtgatctc ggctcaactgc agcctttgcc tcccgggttc aagagattct cctgcctcag 2340
96 tctctcgagt agctgggact acaggtgccc atcaccacgc ctggctaatt tttgtatttt 2400
98 tagtagagac aggttttcac cacattggct aggtcgtct tgaactcctg acctcgtgat 2460
100 ctgcccgtct cggcctccca aagtgcctggg attacaggca tcagccacca ccccagctc 2520
102 cctgtcccta tctttcctca ctgtccagcc cctgaccctg tttattccct gccagctgag 2580
104 ccctggaggg cagatggagg aggtggccgg ggctgtcaag cagatctccg acagaggccc 2640
106 tgtccgtct gaagatgagt cggtggaagc taagagagag cggccctca 2689
109 <210> SEQ ID NO: 2
110 <211> LENGTH: 465
111 <212> TYPE: DNA
112 <213> ORGANISM: Human hepatitis B virus
114 <400> SEQUENCE: 2
115 atggctgctc ggggtgtgctg ccaactggat ccttcgcggg acgtcctttg tctacgtccc 60
117 gtgcgcgctg aatcccgcgg acgaccgctc tcggggcctt ttggggctct atcgtcccct 120
119 tcttcactct cgttccggc cgaccacggg gcgcacctct ctttacgcgg tctcccctgc 180
121 tgtgccttct catctgccgg accgtgtgca cttcgcttca cctctgcacg tcgcatggag 240
123 accaccgtga acgcccacca ggtcttgccc aaggctttac ataagaggac tcttgactc 300
125 tcatcaatgt caacgaccga ccttgaggca tacttcaaag actgtttgtt taaggactgg 360
127 gaggagttag gggaggagat taggttaaag gtctttgtac taggaggctg taggcataaa 420
129 ttggtctgtt caccagcacc atgcaacttt ttcacctctg cctaa 465
132 <210> SEQ ID NO: 3
133 <211> LENGTH: 720
134 <212> TYPE: DNA
135 <213> ORGANISM: Human
137 <400> SEQUENCE: 3
138 tgaccaata ctgccaatgg ggtgcgagcg gcgcgaggaa gtggatgaac ccacaccgg 60
140 cagggcagaa aagggataga actcagtcgg ccgtcgccac cgtgaaccac tgactgctac 120
142 aggagcgaat aatcgtctac cttgttttaa ccatcattaa cttgggtttt ggtgtttgtt 180
144 tgtttgtttg tgtgtttttc gagacggagt cttgctgggt cgcccaggct ggagtgcagt 240
146 ggcgcgatct gggctcactg caacctccgc ctccgggttc aagcagttct ccctgcctca 300
148 gcctcccag tagctgggat tacaggcgcc ggccaccacg cttgggtaat ttttgattt 360
150 tttagtagag acgggggtttc gtcatgttg ccaggctggc ctggaactcc tgacctcaag 420
152 tgatccgctc acctcagcct cccaaagtgc tgggattaca ggcataaaac actgcgccc 480
154 gccggttttg ttttttaata agtaaccgag cctgcattct aaccaataaa ctctattctat 540
156 taaaacacgc ctgtggtgcc cagggccagc aggttgtctc atgtcaggtt ctcccagaag 600
158 ccgagcctga gagcaggatt caggtgcaaa tgtttcctta gggagtctt tccagctgaa 660
160 accagcgagg gagccaggga aaaagaagga gaagacaagc aagggtttct tcaatttcca 720
163 <210> SEQ ID NO: 4
164 <211> LENGTH: 22
165 <212> TYPE: DNA

```

RAW SEQUENCE LISTING

DATE: 09/18/2006

PATENT APPLICATION: US/10/591,454

TIME: 15:22:55

Input Set : A:\Q96749 Seq List.txt

Output Set: N:\CRF4\09182006\J591454.raw

```

166 <213> ORGANISM: Artificial Sequence
W--> 167 <220> FEATURE:
168 <223> OTHER INFORMATION: Primer sequence for amplification of HBV-X
170 <400> SEQUENCE: 4
171 tgccatggag accaccgtga ac 22
174 <210> SEQ ID NO: 5
175 <211> LENGTH: 24
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
W--> 178 <220> FEATURE:
179 <223> OTHER INFORMATION: Primer sequence for amplification of HBV-X
181 <400> SEQUENCE: 5
182 tgcccaaggt cttacataag agga 24
185 <210> SEQ ID NO: 6
186 <211> LENGTH: 27
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
W--> 189 <220> FEATURE:
190 <223> OTHER INFORMATION: Primer sequence for amplification of an adaptor
192 <400> SEQUENCE: 6
193 ccataccta acgactcact atagggc 27
196 <210> SEQ ID NO: 7
197 <211> LENGTH: 23
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence
W--> 200 <220> FEATURE:
201 <223> OTHER INFORMATION: Primer sequence for amplification of an adaptor
203 <400> SEQUENCE: 7
204 actcactata gggctcgagc ggc 23
207 <210> SEQ ID NO: 8
208 <211> LENGTH: 29
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
W--> 211 <220> FEATURE:
212 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
214 <400> SEQUENCE: 8
215 actttccagc attgcgggga accctcaga 29
218 <210> SEQ ID NO: 9
219 <211> LENGTH: 30
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial Sequence
W--> 222 <220> FEATURE:
223 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
225 <400> SEQUENCE: 9
226 tggtcctccc cagacctggc cttctctgt 30
229 <210> SEQ ID NO: 10
230 <211> LENGTH: 24
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial Sequence

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/591,454

DATE: 09/18/2006

TIME: 15:22:55

Input Set : A:\Q96749 Seq List.txt

Output Set: N:\CRF4\09182006\J591454.raw

```

W--> 233 <220> FEATURE:
      234 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
      236 <400> SEQUENCE: 10
      237 gctctctcttt agcttccacc gact                                     24
      240 <210> SEQ ID NO: 11
      241 <211> LENGTH: 23
      242 <212> TYPE: DNA
      243 <213> ORGANISM: Artificial Sequence

W--> 244 <220> FEATURE:
      245 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
      247 <400> SEQUENCE: 11
      248 agggcctctg tcggagatct gct                                     23
      251 <210> SEQ ID NO: 12
      252 <211> LENGTH: 23
      253 <212> TYPE: DNA
      254 <213> ORGANISM: Artificial Sequence

W--> 255 <220> FEATURE:
      256 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
      258 <400> SEQUENCE: 12
      259 ctggcagggg ataaacaggg tca                                     23
      262 <210> SEQ ID NO: 13
      263 <211> LENGTH: 30
      264 <212> TYPE: DNA
      265 <213> ORGANISM: Artificial Sequence

W--> 266 <220> FEATURE:
      267 <223> OTHER INFORMATION: Primer sequence for amplification of HBV-X
      269 <400> SEQUENCE: 13
      270 tcgcaactgg atccttcgcg ggacgtcctt                             30
      273 <210> SEQ ID NO: 14
      274 <211> LENGTH: 28
      275 <212> TYPE: DNA
      276 <213> ORGANISM: Artificial Sequence

W--> 277 <220> FEATURE:
      278 <223> OTHER INFORMATION: Primer sequence for amplification of HBV-X
      280 <400> SEQUENCE: 14
      281 gcgaagcttg ttcacggtgg tctccatg                               28
      284 <210> SEQ ID NO: 15
      285 <211> LENGTH: 30
      286 <212> TYPE: DNA
      287 <213> ORGANISM: Artificial Sequence

W--> 288 <220> FEATURE:
      289 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
      291 <400> SEQUENCE: 15
      292 atgcggggac cttgcacagg ggactcggga                             30
      295 <210> SEQ ID NO: 16
      296 <211> LENGTH: 30
      297 <212> TYPE: DNA
      298 <213> ORGANISM: Artificial Sequence

W--> 299 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 09/18/2006

PATENT APPLICATION: US/10/591,454

TIME: 15:22:55

Input Set : A:\Q96749 Seq List.txt

Output Set: N:\CRF4\09182006\J591454.raw

```

300 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
302 <400> SEQUENCE: 16
303 ctgacccagg gccacagcag catgacggca 30
306 <210> SEQ ID NO: 17
307 <211> LENGTH: 30
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
W--> 310 <220> FEATURE:
311 <223> OTHER INFORMATION: Primer sequence for amplification of MLL4
313 <400> SEQUENCE: 17
314 cgggacactc tcagtctcgg acgccgatga 30
317 <210> SEQ ID NO: 18
318 <211> LENGTH: 23
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
W--> 321 <220> FEATURE:
322 <223> OTHER INFORMATION: Primer sequence for amplification of Chromosome 17
324 <400> SEQUENCE: 18
325 agtttgtgct ccctccctgc aga 23
328 <210> SEQ ID NO: 19
329 <211> LENGTH: 22
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial Sequence
W--> 332 <220> FEATURE:
333 <223> OTHER INFORMATION: Primer sequence for amplification of Chromosome 17
335 <400> SEQUENCE: 19
336 agcggcgcgga ggaagtggat ga 22
339 <210> SEQ ID NO: 20
340 <211> LENGTH: 30
341 <212> TYPE: DNA
342 <213> ORGANISM: Artificial Sequence
W--> 343 <220> FEATURE:
344 <223> OTHER INFORMATION: Primer sequence for amplification of Chromosome 17
346 <400> SEQUENCE: 20
347 gaaaagccta gcccttgcc ttaaggcagg 30
350 <210> SEQ ID NO: 21
351 <211> LENGTH: 30
352 <212> TYPE: DNA
353 <213> ORGANISM: Artificial Sequence
W--> 354 <220> FEATURE:
355 <223> OTHER INFORMATION: Primer sequence for amplification of Chromosome 17
357 <400> SEQUENCE: 21
358 agctcccttg ggctcaggcc acggcaggga 30

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/591,454

DATE: 09/18/2006

TIME: 15:22:56

Input Set : A:\Q96749 Seq List.txt

Output Set: N:\CRF4\09182006\J591454.raw

L:4 M:283 W: Missing Blank Line separator, <120> field identifier
L:5 M:283 W: Missing Blank Line separator, <130> field identifier
L:6 M:270 C: Current Application Number differs, Replaced Current Application No
L:6 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:8 M:283 W: Missing Blank Line separator, <160> field identifier
L:167 M:283 W: Missing Blank Line separator, <220> field identifier
L:178 M:283 W: Missing Blank Line separator, <220> field identifier
L:189 M:283 W: Missing Blank Line separator, <220> field identifier
L:200 M:283 W: Missing Blank Line separator, <220> field identifier
L:211 M:283 W: Missing Blank Line separator, <220> field identifier
L:222 M:283 W: Missing Blank Line separator, <220> field identifier
L:233 M:283 W: Missing Blank Line separator, <220> field identifier
L:244 M:283 W: Missing Blank Line separator, <220> field identifier
L:255 M:283 W: Missing Blank Line separator, <220> field identifier
L:266 M:283 W: Missing Blank Line separator, <220> field identifier
L:277 M:283 W: Missing Blank Line separator, <220> field identifier
L:288 M:283 W: Missing Blank Line separator, <220> field identifier
L:299 M:283 W: Missing Blank Line separator, <220> field identifier
L:310 M:283 W: Missing Blank Line separator, <220> field identifier
L:321 M:283 W: Missing Blank Line separator, <220> field identifier
L:332 M:283 W: Missing Blank Line separator, <220> field identifier
L:343 M:283 W: Missing Blank Line separator, <220> field identifier
L:354 M:283 W: Missing Blank Line separator, <220> field identifier